ALASKA DEPARTMENT OF FISH AND GAME
DIVISION OF COMMERCIAL FISHERIES
NEWS RELEASE

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2014 Preliminary Kuskokwim Area Salmon Season Summary

Kuskokwim Area Management

The Kuskokwim River salmon fisheries were managed according to the Kuskokwim River Salmon Management Plan (5 AAC 07.365). The Kuskokwim Bay salmon fisheries were managed according to the District 4 Salmon Management Plan (5 AAC 07.367).

A total of 343,627 salmon were commercially harvested from the Kuskokwim Area (Table 1). A total of 457 individual permit holders (each making at least one recorded landing) participated in area commercial fisheries, which had an estimated exvessel value of $2,233,579; this was approximately 27% above the most recent 10-year average value (Table 2).

Kuskokwim River

Preseason Forecast and Management Strategies

The 2014 Kuskokwim River Chinook salmon forecast was for a return of 71,000–116,000. The drainagewide Chinook salmon sustainable escapement goal (SEG) is 65,000–120,000. Average subsistence Chinook salmon harvest is 84,000. If the run came back as forecasted then there would not have been enough Chinook salmon to provide for escapement and subsistence needs.

Inseason Subsistence Management

Preseason management actions were jointly recommended by the Alaska Department of Fish and Game (ADF&G), and the United States Fish and Wildlife Service (USFWS) in an effort to achieve escapement goals. The Kuskokwim River Salmon Management Working Group (Working Group) voted unanimously to support the recommendation.

On April 17, the Federal Subsistence Board adopted a Special Action to close the Kuskokwim Chinook salmon fishery to non-Federally qualified users within the boundary of the Yukon Delta National Wildlife Refuge. Subsistence fishing in the Kuskokwim River was restricted to the use of gillnets with 4-inch or less mesh size not to exceed 60-feet in length within the Yukon Delta

National Wildlife Refuge boundaries beginning May 20 downstream of Tuluksak, and on May 27 between Tuluksak and Aniak. This restriction was also implemented upstream of Aniak beginning June 1. Fishing for Chinook salmon with hook and line gear was closed drainagewide beginning May 1. An area at the mouth of the Kuskokwim River (east of the Ishkowik River to the northern boundary of District W-5) was also closed to subsistence fishing in order to provide additional protection to Chinook salmon entering the Kuskokwim River.

The 2014 fishing season was the first in which dip nets could be used as a legal salmon subsistence fishing gear in the Kuskokwim River drainage. The Board of Fisheries approved dip nets as a method to allow subsistence opportunity during times of Chinook salmon conservation. Subsistence fishing with dip nets was allowed beginning June 15, with additional opportunity provided sequentially upstream as run timing dictated. All Chinook salmon caught in a dip net were required to be immediately released unharmed.

As chum and sockeye salmon abundance started to exceed Chinook salmon abundance, as indicated by Bethel Test Fish (BTF), limited subsistence fishing opportunity with 6-inch mesh gillnet gear was provided. The first 6-inch mesh fishing period was on June 20, with additional opportunity provided sequentially upstream as run timing dictated. Fish wheels were required to have a live box from June 19–August 4 to facilitate the live release of Chinook salmon. The Kwethluk, Kasigluk, Kisaralik, Tuluksak, and Aniak river drainages remained restricted to the use of 4-inch mesh gillnets through August 4.

Postseason subsistence harvest surveys are presently being conducted. An accounting of subsistence salmon harvest in 2014 will not be available until after postseason harvest surveys have been completed, data have been analyzed, and preliminary harvest estimates are produced.

District 1 Commercial Fishery

2014 Commercial Harvest Outlook and Harvest

	Chinook	Sockeye	Coho	Chum
2014 Outlook	0	5,000–20,000	80,000–140,000	100,000–200,000
2014 Harvest	0	2,714	117,557	19,048

The first District 1 commercial fishing period was on July 14 and the last on August 26 with a total of 8 commercial fishing periods (Table 3). The initiation of the commercial fishery was delayed until the majority of the chum salmon run had passed through the district to ensure ongoing Chinook salmon conservation. As a result, commercial fishing occurred well after the peak of the sockeye and chum salmon runs had passed through the district. A total of 0 Chinook; 2,714 sockeye; 117,557 coho; and 19,048 chum salmon were commercially harvested (Table 3 and 4). A total of 35 Chinook salmon were reported as harvested during the commercial fishery, but they were retained for personal use as the buyers agreed to not purchase Chinook salmon because of the poor run. Harvests of sockeye, coho, and chum salmon were below their respective recent 10-year averages (Table 4). Landings were attributed to 358 individual permits. The price per pound for sockeye was $1.25; coho was $.95; and chum salmon was $.60. Total exvessel value of $813,063 was above the most recent 10-year average value (Table 2).

Run Timing and Escapement

Chinook Salmon

Due to the early season subsistence fishery closures, BTF was not a good indicator of Chinook salmon run timing. Subsistence harvest is historically weighted towards the beginning of the run, and the lack of this fishery resulted in the evaluation of a larger proportion of the early run than other years on record. The signal at BTF was that the run was early, which was possible given the early break-up of ice along the river, however the inability to assess the impact the change in harvest had on run timing, we were unable to specify run timing relative to other years. Run timing at escapement projects was early to average at all projects.

Chinook salmon escapements at Kogrukluk and Kwethluk rivers were below the respective SEGs, while the George River Chinook salmon SEG was achieved (Table 5). Seven tributaries have aerial survey SEGs and escapements at all of the tributaries were within the respective SEG ranges (Table 6). The Kuskokwim River drainagewide SEG was likely achieved, but it will not be fully assessed until after estimates are made this winter.

Sockeye Salmon

Based on BTF and escapements at tributary weirs, sockeye salmon run timing was average. Overall, sockeye salmon escapement was below average. The Kogrukluk River weir has the only established sockeye salmon escapement goal and the escapement was within the SEG (Table 7).

Chum Salmon

Chum salmon run timing was average to late and the overall size of the run was smaller than expected. Escapement at the Kogrukluk River weir was above the SEG (Table 8). Although Aniak River has an established SEG for chum salmon based on sonar indices, the sonar project has discontinued operation in favor of weir based escapement assessment on the Salmon River of the Aniak.

Coho Salmon

Coho salmon run timing was early, and escapements were above average with returns into the Kwethluk and Kogrukluk rivers exceeding their established escapement goals (Table 9).

Kuskokwim Bay

2014 Commercial Harvest Outlook and Harvest, Districts 4 and 5

	Chinook	Sockeye	Coho	Chum
2014 Outlook	0–3,000	40,000–100,000	30,000–70,000	60,000–130,000
2014 Harvest	2,470	79,394	104,475	17,966

District 4 (Quinhagak)

The District 4 commercial fishing season began on July 9 and ended on August 27. There were 18 commercial fishing periods (Table 10). The commercial fishing season was delayed from the normal start of June 15 and subsistence salmon fishing was closed on Sundays for the month of June, due to concerns for Chinook salmon abundance.

A total of 2,265 Chinook; 58,879 sockeye; 52,317 coho; and 14,563 chum salmon were commercially harvested (Table 10 and 11). Catch rates for Chinook and chum salmon were below average, while catch rates for sockeye and coho salmon were above average. Coho salmon harvest was approximately 13% above the most recent 10-year average. Chinook, sockeye, and chum salmon harvests were below the most recent 10-year averages (87%, 26%, and 77% respectively; Table 1). The Chinook salmon harvest was the second lowest since 1967. Chum salmon harvest was the second lowest since 1987. A total of 194 individual permit holders (making at least one recorded landing) participated in the commercial fishery. Chinook, sockeye, chum, and coho salmon were purchased for $1.00, $1.25, $0.60, and $0.96 per pound respectively. Total exvessel value of the fishery was $844,734; approximately 4% above the most recent 10-year average value (Table 2).

Run Timing and Escapement

Based on escapement at the Kanektok River weir; the Chinook, sockeye, and chum salmon runs were one to two days earlier than average. Chinook and chum salmon escapements at the Kanektok River weir were below average, while the sockeye salmon escapement was the third highest on record (Table 12). The Kanektok River Chinook salmon aerial survey SEG (range 3,500–8,000) was not achieved with 1,871 fish observed, while the sockeye salmon aerial survey SEG (range 14,000–34,000) was exceeded with 148,800 fish observed (Table 12). Coho salmon were not completely enumerated at the Kanektok River weir.

District 5 (Goodnews Bay)

The District 5 commercial fishing season began on July 9 and ended on August 27. There were 17 commercial fishing periods. Over the last two years the Goodnews River has seen some of the lowest Chinook salmon escapements on record. The 2014 return was expected to be similar to 2013. The subsistence salmon fishery was restricted to the use of gillnets with a mesh size of 6 inches or less, for the month of June, due to the concern for low Chinook salmon abundance. The commercial fishery was delayed until July 9, for the same reason.

A total of 205 Chinook; 20,515 sockeye; 52,158 coho; and 3,403 chum salmon were commercially harvested (Table 13 and 14). Chinook and chum salmon catch rates were below average. Catch rates for sockeye salmon were average and coho salmon catch rates were above average. Coho salmon harvest was approximately 70% above the most recent 10-year average. Chinook, sockeye and chum salmon harvests were below the most recent 10-year averages (90%, 36%, and 75% respectively). The Chinook salmon harvest was the lowest since 1972. Chum salmon harvest was the lowest since 2005. Coho harvest was the highest on record. A total of 61 individual permit holders (making at least one recorded landing) participated in the fishery. Chinook, sockeye, chum, and coho salmon were purchased for $1.00, $1.25, $0.60, and $0.98 per pound respectively. Total exvessel value of the fishery was $576,489; which is approximately 48% above the most recent 10-year average value (Table 2).

Run Timing and Escapement

Based on escapement counts at the Goodnews River weir; Chinook, sockeye, and chum salmon run timing was one to three days earlier than average. The Chinook salmon biological escapement goal (BEG) of 1,500–2,900 fish was not met with an estimated escapement of 750 fish. The sockeye salmon BEG (range 18,000–40,000) was exceeded with an estimated escapement of 41,496 fish. The chum salmon lower bound SEG of 12,000 was not achieved with

an estimated escapement of 11,506 fish (Table 15). The Middle Fork Goodnews River weir was removed on September 1; therefore an accurate estimate of coho salmon escapement was not obtainable. An aerial survey was flown at the North Fork Goodnews River on July 26. The Chinook salmon aerial SEG of 640–3,300 fish was not achieved with a count of 620 fish, while the sockeye salmon SEG of 5,500–19,500 was achieved with 8,880 fish counted.

Kuskokwim Area Preliminary 2015 Management Strategy

The department will be working with the public to implement a conservative management strategy for Chinook salmon similar to the 2014 season. In general, management will be restrictive at the onset of the season with the potential to relax restrictions based on inseason information if warranted. Management options and specific actions to be taken will be discussed with federal managers, the Working Group, and public stakeholders through the winter with the expectation for finalized management strategies prior to the season. Management options under consideration in the Kuskokwim River include significant reductions in subsistence fishing time, gillnet mesh size and fish wheel restrictions, and delaying the onset of commercial fishing in District 1 to avoid incidental harvest of Chinook salmon.

In District 4, Quinhagak, management options under consideration include gillnet mesh size restrictions in the subsistence fishery and delaying opening of the commercial fishery until the majority of Chinook salmon have passed through the district.

In District 5, Goodnews Bay, management options under consideration include gillnet mesh size restrictions in the subsistence fishery, delaying opening of the commercial fishery until sockeye salmon become abundant in the district, and reducing the District 5 commercial fishing area similar to 2013 until the majority of Chinook salmon have passed through the district.

Table 1.–Commercial salmon harvest and exvessel value by District, Kuskokwim Area, 2014.

	Chinook	Sockeye	Coho	Pink	Chum	Total
Lower Kuskokwim River, District 1						
Fish	0	2,714	117,557	3	19,048	139,322
Pounds	0	15,932	759,583	13	119,241	894,769
Price	$1.00	$1.25	$0.95	$0.00	$0.60	
Value	$0	$19,915	$721,604	$0	$71,545	$813,063
Recent 10-yr Average 2004–2013						
Fish	2,837	13,031	148,438	2	58,024	222,332
Value	$24,287	$60,246	$448,124	$0	$125,224	$657,881
Quinhagak, District 4						
Fish	2,265	58,879	52,317	0	14,563	128,024
Pounds	22,940	326,686	368,282	0	99,809	817,717
Price	$1.00	$1.25	$0.96	$0.00	$0.60	
Value	$22,940	$408,358	$353,551	$0	$59,885	$844,734
Recent 10-yr Average 2004–2013						
Fish	15,440	74,177	43,482	2	61,874	194,974
Value	$149,357	$329,562	$157,773	$0	$173,721	$810,414
Goodnews Bay, District 5						
Fish	205	20,515	52,158	0	3,403	76,281
Pounds	3,065	121,957	415,146	0	23,557	563,725
Price	$1.00	$1.25	$0.98	$0.00	$0.60	
Value	$3,065	$152,446	$406,843	$0	$14,134	$576,489
Recent 10-yr Average 2004–2013						
Fish	1,926	31,861	16,026	0	13,219	63,032
Value	$19,252	$156,840	$75,209	$0	$40,127	$291,428
Kuskokwim Area Total						
Fish	2,470	82,108	222,032	3	37,014	343,627
Pounds	26,005	464,575	1,543,011	13	242,607	2,276,211
Price	$1.00	$1.25	$0.96	$0.00	$0.60	
Value	$26,005	$580,719	$1,481,291	$0	$145,564	$2,233,579
Recent 10-yr Average 2004–2013						
Fish	22,164	126,556	213,631	5	134,244	496,600
Value	$209,476	$570,868	$624,406	$1	$283,938	$1,688,689

Table 2.–Commercial salmon fishing estimated exvessel value and permits fished by district, Kuskokwim Area, 2004–2014.

	District 1		District 4		District 5		Total	
Year	Value	Permits [a]	Value	Permits [a]	Value	Permits [a]	Value	Permits [a]
2004	$943,767	390	$405,344	116	$227,680	29	$1,484,358	467
2005	$448,853	403	$571,965	145	$134,295	29	$1,155,113	484
2006	$451,390	373	$551,182	132	$141,235	24	$1,143,806	453
2007	$380,842	366	$660,865	125	$223,329	28	$1,265,034	456
2008	$538,310	374	$750,731	146	$198,070	25	$1,487,234	462
2009	$502,848	342	$747,326	179	$192,031	39	$1,442,202	434
2010	$765,607	433	$1,655,326	241	$473,674	48	$2,894,766	530
2011	$764,358	413	$1,176,435	219	$346,022	48	$2,287,202	510
2012	$597,998	379	$824,435	179	$617,766	58	$2,040,296	477
2013	$1,184,847	378	$761,537	197	$452,651	71	$2,399,035	469
2014	$813,063	358	$844,734	194	$576,489	61	$2,233,579	457
Average 2004–2013	$657,882	385	$810,515	168	$300,675	40	$1,759,905	474

[a] Number of permits that made at least one delivery.

Table 3.–Commercial harvest by period in the District 1, Kuskokwim River, 2014.

Date	Permits Fished	Hours Fished	Subdistrict	Permit Hours	Chinook[a] Catch	Chinook[a] CPUE	Sockeye Catch	Sockeye CPUE	Coho Catch	Coho CPUE	Chum Catch	Chum CPUE
Jul 14	146	4	1-B	584		0.0	1,063	1.8	0	0.0	7,491	12.8
Jul 18	166	8	1-B	1,328		0.0	849	0.6	1,919	1.4	7,379	5.6
Jul 21	158	6	1-B	948		0.0	618	0.7	3,465	3.7	3,898	4.1
Aug 11	187	6	1-B	1,122		0.0	116	0.1	23,999	21.4	171	0.2
Aug 14	251	6	1-B	1,506		0.0	25	0.0	32,570	21.6	31	0.0
Aug 18	245	6	1-B	1,470		0.0	9	0.0	26,395	18.0	22	0.0
Aug 21	243	6	1-B	1,458		0.0	20	0.0	18,809	12.9	35	0.0
Aug 26	188	6	1-B	1,128		0.0	14	0.0	10,400	9.2	21	0.0
Total		48		9,544	0		2,714		117,557		19,048	

[a] The processor did not purchase Chinook salmon in 2014. Any Chinook salmon caught during commercial openings were retained for personal use.

Table 4.–Commercial salmon harvest, excluding personal use, District W-1, Kuskokwim River, Kuskokwim Management Area, 2004–2014.

Year	Chinook	Sockeye	Coho	Chum	Total
2004	2,305	8,532	435,407	20,150	466,394
2005	4,784	27,645	142,319	69,139	243,887
2006	2,777	12,618	185,598	44,070	245,063
2007	179	703	141,049	10,763	152,694
2008	8,865	15,601	142,862	30,516	197,844
2009	6,664	25,673	104,546	76,790	213,673
2010	2,731	22,428	58,031	93,148	176,338
2011	49	13,482	74,108	118,256	205,895
2012	14	2,857	86,389	65,171	154,431
2013	1	768	114,069	52,235	167,073
2014	0	2,714	117,557	19,048	139,319
Average 2004–2013	2,837	12,093	145,630	54,481	222,329

Table 5.–Chinook salmon spawning weir escapement, Kuskokwim River drainage, Kuskokwim Management Area 2004–2014.

	Chinook Salmon Escapement						
Year	Kwethluk	Tuluksak	George	Kogrukluk	Tatlawiksuk	Takotna	Salmon
2004	28,605	1,475	5,207	19,651	2,833	461	[a]
2005	[a]	2,653	3,845	22,000	2,918	499	[a]
2006	17,619	1,043	4,357	19,414	1,700	539	[a]
2007	13,267	374	4,883	13,029	2,061	418	6,220
2008	5,312	701	2,698	9,730	1,071	413	2,376
2009	5,710	362	3,663	9,702	1,071	311	[a]
2010	1,693	201	1,500	5,690	567	178	[a]
2011	4,079	288	1,571	6,891	1,012	134	[a]
2012	[a]	560	2,302	[a]	1,116	228	[a]
2013	[a]	193	1,219	1,772	495	94	598
2014[b]	3,187	320	2,680	3,732	1,897	[a]	1,700
SEG	4,100–7,500		1,800–3,300	4,800–8,800			
Average 2004–2013	10,898	785	3,125	11,987	1,484	328	3,065

[a] Weir did not operate or counts were incomplete.
[b] Preliminary numbers subject to change.

Table 6.–Chinook salmon spawning aerial survey index estimates, Kuskokwim River Drainage, Kuskokwim Management Area, 2004–2014.

	Lower Kuskokwim River [a]				Middle Kuskokwim River [a]						Upper Kuskokwim River [a]		
Year	Eek	Kwethluk Canyon C.	Kisaralik	Tuluksak	Aniak	Kipchuk	Salmon	Holokuk	Oskawalik	Holitna	Gagarayah	Cheeneetnuk	Salmon (Pitka)
2004	4,653	6,801	5,157	1,196	5,362	1,868	2,177	306	293	4,051	670	918	1,138
2005	[b]	5,059	2,206	672	[b]	1,679	4,097	268	582	1,760	788	1,155	1,801
2006	[b]	[b]	4,734	[b]	5,639	1,618	[b]	365	386	1,866	531	1,015	862
2007	[b]	[b]	692	173	3,984	2,147	1,458	146	[b]	[b]	1,035	[b]	943
2008	[b]	487	1,074	[b]	3,222	1,061	589	190	213	[b]	177	290	1,305
2009	[b]	[b]	[b]	[b]	[b]	[b]	[b]	390	379	[b]	303	323	632
2010	[b]	[b]	235	[b]	[b]	[b]	[b]	108	[b]	587	62	[b]	135
2011	263	[b]	534	[b]	[b]	116	79	20	26	[b]	96	249	767
2012	[b]	[b]	610	[b]	[b]	193	49	9	51	[b]	178	229	670
2013	240	1,165	597	83	754	261	154	29	38	670	74	138	475
2014	206	[b]	622	[b]	3,201	1,220	497	80	200	1,785	359	340	1,865
Escapement Goal Range:			400–1,200		1,200–2,300		330–1,200			970–2,100	300–830	340–1,300	470–1,600
Average 2004–2013	1,719	3,378	1,760	531	3,792	1,118	1,229	183	246	1,787	391	540	873

[a] Estimates are from aerial surveys conducted during peak spawning periods under 'good' or 'fair' survey conditions.
[b] Survey was either not flown or did not meet acceptable survey criteria.

Table 7.–Sockeye salmon spawning weir escapement, Kuskokwim River drainage, Kuskokwim Management Area 2004–2014.

	Sockeye Salmon Escapement							
Year	Kwethluk	Tuluksak	George	Kogrukluk	Tatlawiksuk	Takotna	Telaquana	Salmon
2003	2,928	288	16	9,164	[a]	3	[a]	[a]
2004	3,490	136	177	6,775	10	17	[a]	[a]
2005	[a]	642	276	37,939	77	34	[a]	[a]
2006	6,732	985	164	60,807	41	59	[a]	[a]
2007	5,262	352	74	16,525	27	13	[a]	2,130
2008	2,451	188	94	19,675	39	12	[a]	1,181
2009	4,385	686	54	23,785	39	3	[a]	[a]
2010	4,242	437	115	13,995	33	8	72,021	[a]
2011	2,031	126	43	8,132	23	1	35,105	[a]
2012	[a]	187	79	[a]	9	0	22,994	[a]
2013	[a]	394	150	7,882	37	0	27,806	966
2014[b]	3,776	526	154	6,407	9	[a]	23,820	746
SEG				4,400–17,000				
Average 2004–2013	3,922	412	113	20,468	34	14	39,482	1,426

[a] Weir did not operate or counts were incomplete.
[b] Preliminary numbers subject to change.

Table 8.–Chum salmon spawning weir escapement, Kuskokwim River drainage, Kuskokwim Management Area 2004–2014.

	Chum Salmon Escapement							
Year	Kwethluk	Tuluksak	George	Kogrukluk	Tatlawiksuk	Takotna	Aniak	Salmon
2004	38,646	11,796	14,409	24,201	21,245	1,630	672,931	[a]
2005	[a]	35,696	14,828	197,723	55,720	6,467	1,151,505	[a]
2006	47,490	25,650	41,467	180,594	32,301	12,598	1,108,626	[a]
2007	54,913	17,286	55,842	49,505	83,246	8,900	696,801	25,379
2008	20,030	12,550	29,978	44,978	30,896	5,691	427,911	9,459
2009	32,191	13,671	7,941	84,940	19,975	2,487	479,531	[a]
2010	19,242	13,042	26,154	63,583	36,701	4,057	429,643	[a]
2011	18,329	9,828	44,640	76,384	84,202	8,414	345,630	[a]
2012	[a]	16,981	34,336	[a]	44,572	6,050	[a]	[a]
2013	[a]	12,911	36,874	66,834	32,277	6,412	[a]	7,666
2014[b]	17,941	8,724	16,471	30,241	12,056	[a]	[a]	2,684
SEG				15,000–49,000			222,000–480,000	
Average 2004–2013	31,098	16,941	30,647	87,638	44,114	6,271	664,072	14,168

[a] Weir did not operate or counts were incomplete.
[b] Preliminary numbers subject to change.

Table 9.–Coho salmon spawning weir escapement, Kuskokwim River drainage, Kuskokwim Management Area, 2004–2014.

Year	Coho Salmon Escapement						
	Kwethluk	Tuluksak	George	Kogrukluk	Tatlawiksuk	Takotna	Salmon
2004	64,216	20,336	12,499	27,041	16,410	3,207	[a]
2005	[a]	11,324	8,200	24,116	7,495	2,216	[a]
2006	25,664	6,111	11,296	17,011	9,453	5,548	[a]
2007	20,257	2,807	29,317	27,033	8,685	2,853	[a]
2008	49,971	7,457	21,931	29,661	11,065	2,817	11,022
2009	21,911	8,137	12,573	22,981	10,148	2,708	6,391
2010	[a]	1,216	12,961	13,971	3,520	3,217	[a]
2011	[a]	[a]	30,028	24,174	12,928	4,063	[a]
2012	19,960	4,407	15,272	13,697	8,070	1,838	[a]
2013	[a]	6,490	13,894	23,590	13,076	4,149	2,869
2014[b]	43,945	13,672	35,721	33,224	19,809	[a]	7,768
SEG	>19,000			13,000–28,000			
Average 2004–2013	33,663	7,587	16,797	22,328	10,085	3,262	6,761

[a] Weir did not operate or counts were incomplete.
[b] Preliminary numbers subject to change.

Table 10.–Commercial harvest by period in the District 4, Kuskokwim Bay, 2014.

	Permits	Hours	Permit	Chinook		Sockeye		Coho		Chum	
Date	Fished	Fished	Hours	Catch	CPUE	Catch	CPUE	Catch	CPUE	Catch	CPUE
Jul 9	132	12	1,584	701	0.4	12,183	7.7	0	0.0	2,194	1.4
Jul 11	121	12	1,452	616	0.4	11,651	8.0	0	0.0	2,274	1.6
Jul 14	100	12	1,200	285	0.2	11,263	9.4	0	0.0	2,660	2.2
Jul 16	115	12	1,380	230	0.2	8,387	6.1	13	0.0	1,943	1.4
Jul 18	69	12	828	114	0.1	5,078	6.1	20	0.0	1,208	1.5
Jul 21	62	12	744	77	0.1	3,437	4.6	47	0.1	1,263	1.7
Jul 23	64	12	768	51	0.1	2,321	3.0	71	0.1	857	1.1
Jul 25	65	12	780	53	0.1	1,802	2.3	180	0.2	1,007	1.3
Aug 4	86	12	1,032	33	0.0	741	0.7	2,935	2.8	308	0.3
Aug 6	82	12	984	27	0.0	557	0.6	5,546	5.6	279	0.3
Aug 8	82	12	984	26	0.0	425	0.4	4,682	4.8	167	0.2
Aug 11	64	12	768	14	0.0	299	0.4	5,500	7.2	112	0.1
Aug 13	96	12	1,152	12	0.0	238	0.2	7,333	6.4	113	0.1
Aug 15	73	12	876	11	0.0	249	0.3	6,579	7.5	70	0.1
Aug 18	58	12	696	5	0.0	134	0.2	4,874	7.0	48	0.1
Aug 22	67	12	804	2	0.0	39	0.0	6,641	8.3	16	0.0
Aug 25	68	12	816	3	0.0	44	0.1	5,249	6.4	23	0.0
Aug 27	47	12	564	5	0.0	31	0.1	2,647	4.7	21	0.0
Total	194	216	17,412	2,265		58,879		52,317		14,563	

Table 11.–Commercial salmon harvest District 4, Quinhagak, Kuskokwim Bay, 2004-2014.

Year	Chinook	Sockeye	Coho	Chum	Total
2004	25,462	34,627	82,398	25,820	168,307
2005	24,195	68,801	51,780	13,529	158,305
2006	19,184	106,308	26,831	39,151	191,474
2007	19,573	109,343	34,710	61,228	224,854
2008	13,812	69,743	94,257	57,033	234,845
2009	13,920	112,153	48,115	91,158	265,346
2010	14,230	138,362	13,690	106,610	272,892
2011	15,387	38,543	30,457	104,959	189,346
2012	6,675	37,688	31,214	61,140	136,717
2013	2,054	26,393	58,079	21,126	107,652
2014	2,265	58,879	52,317	14,563	128,024
Average 2004–2013	16,938	79,508	45,939	62,292	204,676

Table 12.–Kanektok River salmon spawning escapement estimates, 2004–2014.

	Weir Escapement				Aerial Survey Escapement	
Year	Chinook	Sockeye	Coho	Chum	Chinook[a]	Sockeye[b]
2004	19,528	102,867	87,828	46,444	28,375	78,380
2005	14,331	242,208	26,343	53,580	14,202	110,730
2006	[c]	[c]	[c]	[c]	8,433	382,800
2007	14,120	307,750	30,471	133,215	[d]	[d]
2008	6,578	141,388	24,490	54,024	3,659	38,900
2009	6,841	272,483	[c]	51,652	[d]	[d]
2010	5,800	202,634	[c]	62,567	1,228	16,950
2011	5,032	84,805	[c]	50,908	[d]	[d]
2012	1,568	88,800	[c]	24,173	[d]	[d]
2013	3,569	128,761	[c]	43,040	2,346	64,802
2014[e]	3,594	256,969	[c]	18,586	1,871	148,800
Average 2004–2013	8,596	174,633	42,283	57,734	9,707	115,427

[a] Chinook salmon SEG is 3,500–8,000 fish.
[b] Sockeye salmon SEG is 14,000–34,000 fish.
[c] Weir did not operate or counts were incomplete.
[d] Survey was either not flown or did not meet acceptable survey criteria.
[e] Preliminary numbers subject to change.

Table 13.–Commercial harvest by period in the District 5, Kuskokwim Bay, 2014.

	Permits	Hours	Permit	Chinook		Sockeye		Coho		Chum	
Date	Fished	Fished	Hours	Catch	CPUE	Catch	CPUE	Catch	CPUE	Catch	CPUE
Jul 9	23	12	276	52	0.2	4,691	17.0	0	0.0	832	3.0
Jul 11	24	12	288	41	0.1	3,124	10.8	0	0.0	635	2.2
Jul 14	34	12	408	40	0.1	3,219	7.9	0	0.0	509	1.2
Jul 16	32	12	384	17	0.0	2,737	7.1	2	0.0	469	1.2
Jul 18	26	12	312	12	0.0	1,424	4.6	3	0.0	255	0.8
Jul 21	25	12	300	12	0.0	1,434	4.8	9	0.0	264	0.9
Jul 25	22	12	264	8	0.0	859	3.3	74	0.3	185	0.7
Aug 4	19	12	228	2	0.0	562	2.5	865	3.8	52	0.2
Aug 6	26	12	312	1	0.0	491	1.6	1,332	4.3	30	0.1
Aug 8	29	12	348	2	0.0	435	1.3	2,428	7.0	39	0.1
Aug 11	36	12	432	4	0.0	336	0.8	5,528	12.8	54	0.1
Aug 13	37	12	444	7	0.0	446	1.0	5,363	12.1	23	0.1
Aug 15	39	12	468	5	0.0	410	0.9	7,329	15.7	22	0.0
Aug 18	25	12	300	2	0.0	95	0.3	5,647	18.8	11	0.0
Aug 22	29	12	348	0	0.0	111	0.3	8,456	24.3	10	0.0
Aug 25	38	12	456	0	0.0	89	0.2	9,045	19.8	9	0.0
Aug 27	41	12	492	0	0.0	52	0.1	6,077	12.4	4	0.0
Total	61	204	6,060	205		20,515		52,158		3,403	

Table 14.–Commercial salmon harvests, District W-5 Goodnews Bay, Kuskokwim Bay, 2004–2014.

Year	Chinook	Sockeye	Coho	Chum	Total
2004	2,565	20,523	24,089	5,965	53,142
2005	2,035	23,933	11,735	2,568	40,271
2006	2,892	29,857	12,436	11,568	56,753
2007	3,126	43,766	13,697	7,853	68,442
2008	1,281	27,237	22,547	10,408	61,473
2009	1,509	32,544	8,406	16,985	59,444
2010	1,752	41,074	4,900	26,914	74,640
2011	2,092	24,573	15,358	13,191	55,214
2012	1,531	50,635	25,515	24,487	102,168
2013	495	24,521	21,581	12,651	59,248
2014	205	20,515	52,158	3,403	76,281
Average 2004–2013	1,928	31,866	16,026	13,259	63,080

Table 15.–Salmon spawning escapement estimates, Middle Fork Goodnews River, Kuskokwim Bay, 2004–2014.

	Middle Fork Goodnews River Weir Escapement			
Year	Chinook	Sockeye	Coho	Chum
2004	4,388	55,926	47,916	31,616
2005	4,633	113,809	15,683	26,690
2006	4,559	126,772	15,969	54,699
2007	3,852	72,282	20,975	49,285
2008	2,161	51,763	36,630	44,699
2009	1,630	25,465	20,000	19,715
2010	2,244	35,762	23,839	26,687
2011	1,861	17,946	23,826	19,974
2012	513	30,472	13,679	10,723
2013	1,168	23,029	[a]	27,673
2014[b]	750	41,496	[a]	11,506
Esc Goal	1,500–2,900	18,000–40,000	>12,000	>12,000
Average 2004–2013	2,871	58,911	24,280	31,565

[a] Weir did not operate or counts were incomplete.
[b] Preliminary numbers subject to change.